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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,985	08/04/2003	Inna Karpov	SC06082-01	5616

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SCHERING-PLOUGH CORPORATION  
PATENT DEPARTMENT (K-6-1, 1990)  
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EXAMINER
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GOLLAMUDI, SHARMILA S

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/633,985	Applicant(s) KARPOV, INNA	
	Examiner Sharmila S. Gollamudi	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006 and 27 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

Receipt of Amendments and Remarks filed 8/28/06 and the IDS filed 9/27/06 is acknowledged.

Claims 1-22 are pending in this application.

#### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 9/27/06 has been considered by the examiner. However, note that EP 1421931 has not been considered since EP '931 is not in the English language and applicant has not provided an English translation or abstract. It has been placed in the application file, but the information referred to therein has not been considered.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Singleton (PGPUB 2004/126337).**

Singleton discloses a composition containing (i) a lipophilic sunscreen, (ii) a copolymer of sodium acryloyldimethyltaurate and one or more acryls, and (iii) an oil-absorbant. See abstract.

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Singleton discloses the composition contains 0.1 to about 50 percent and at least 10% of one or more lipophilic sunscreens. See [0016]. Examples of suitable sunscreens include octocrylene, homosalate, octinoxate, octisalate, avobenzene, oxybenzone, benzophenone-1, benzophenone-2, benzophenone-8, benzophenone-12, ethyl dihydroxypropyl PABA, glyceryl PABA, menthyl antranilate, ethylhexyl dimethyl PABA, methylbenzylidene camphor, isopropyl dibenzoyl methane, and octocrylene. See [0015]. Examples of oil-absorbing agents include, silica (e.g., spherical silicas, porous silicas, and fumed silica powders). See [0021].

Specifically example 1 discloses a sunscreen composition having a SPF of 45. The emulsion comprises water, 0.1-15% homosalate (preferably 15%), 0.1-5% ethylhexyl salicylate (preferably 5%), 0.1-7.5 ethylhexylmethoxycinnamate (preferably 7.5%), 0.1-6% benzophenone-3 (preferably 6%), 0.1-3% avobenzene (preferably 2%), 0.1-20% silica (spheron L-500) (preferably 3.5%), 0.1-10% dimethicone (oil component), 0.1-10% dimethicone & trimethylsiloxysilicate (oil component), and 0.1-10% cetyl dimethicone (oil component), 0.1-10% glyceryl stearate (oil component), among other components. Note that Spheron L-500 is a porous silica, 3-15 microns powder.

### ***Response to Arguments***

Applicant argues that independent claim 1 has been amended to require the silica particles to be treated with an aqueous component/water or the silica particles are in the aqueous component. Applicant argues that claims 8-22 reflect the silica microspheres are part of the aqueous component, i.e. aqueous phase. Applicant argues that Singleton does not teach this and Singleton teaches dispersing the silica particles in the emulsion *after* the emulsion is prepared.

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Applicant's arguments filed 8/28/06 have been fully considered but they are not persuasive.

It is noted that the claim 1 has been amended to include (i) a product-by-process limitation: "wherein the porous silica microspheres are pretreated with water or the aqueous component prior to incorporation into the emulsion" or (ii) the structural limitation that the porous silica microspheres are contained in the aqueous component. Firstly, the examiner points out that porous silica particles are neither soluble in the aqueous phase nor the oil phase. Thus, the particles disperse in both the oil phase and the aqueous phase (applicant's aqueous component). Therefore, the particles are present in both phases. The examiner points out that the instant claims and claim language do not exclude the silica particles from being present in the oil phase. Therefore, applicant's limitation (ii) is fulfilled and the claims only require (i) or (ii).

Although the claim 1 only requires (i) or (ii) and Singleton meets limitation (ii), the examiner will discuss limitation (i). The examiner points out that this limitation does not distinguish the instant claims from the prior art. Applicant argues that the pre-treatment with water prevents adsorption of the oil components. It is noted that pretreatment with water or an aqueous component allows the porous particle to adsorb the hydrophilic component. However, the pre-treatment of the porous particles with water does not preclude the particle from adsorbing oil as argued by applicant. The pre-treated porous particles are still capable of adsorbing the oil components, albeit a lesser amount of oil is adsorbed. The instant specification, page 4 is cited to substantiate the examiner's position:

All of the porous silica microspheres have the capability of absorbing large amounts of oils, which property could adversely affect their usefulness when the emulsion product contains organic ultraviolet-absorbing ingredients, since an unpredictable release from the microspheres of active ingredients after skin application of the product can prevent prolonged maintenance of sunscreens activity, particularly when the skin is in contact with water. Thus, it is preferable to either pre-treat the silica microspheres with water

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or an aqueous solution of product ingredients before the microspheres are incorporated into the emulsion product, or to include the silica microspheres in the aqueous component mixture during the formulation procedure. This will tend to fill the pores with aqueous material and prevent significant subsequent oil absorption.

From this disclosure it is clear that the pretreated particles will still have the ability to adsorb some oil. The complete prevention of adsorption of oil as asserted by applicant is different from "prevent[ing] significant subsequent oil adsorption". The former means that the silica particles cannot adsorb any oil and the latter indicates that the particles can adsorb *some* oil, if not a lot. It is noted that the specification discloses the function of the silica particles in the composition is to adsorb oil to provide the dry feel. Applicant's arguments that the pretreatment of the silica particles prevents any adsorption of oil component is clearly opposite of what is disclosed in the specification. Thus, although the particles are pretreated with water causing the particles to adsorb water, the particles are still capable of adsorbing oil. Therefore, it is unclear what patentable distinction the product-by-process limitation (i) provides since the particles still adsorb *both* oil and water and will disperse in both phases. It should be noted that in a product-by-process limitation, applicant it is applicant's burden to demonstrate the patentable distinction the limitation provides. See MPEP 2113. It appears applicant's assertion is that the process of pretreatment imparts a structural limitation in that the pretreatment prevents adsorption of oil. However, as set forth above, the examiner does not agree with this assertion for the reasons stated above and moreover applicant's assertion is not supported by applicant's disclosure.

Lastly, it is pointed out that Singleton, as acknowledged by applicant, disperses the porous silica particles after the preparation of the emulsion. Thus, the porous particles that disperse in the oil phase will adsorb more oil than water since they are in the oil phase and the

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porous particles that disperse in the aqueous phase will adsorb more water than oil since they are in the aqueous phase; however clearly both phases will contain the particles since the particles are not soluble in either phase.

With regard to claim 8, contrary to applicant's assertion that claim 8 requires the silica particles to be present in the aqueous component, the examiner points out that claim 8 is directed to an emulsion composition for skin application comprising an aqueous component, a sunscreen component totaling at least about 10%, and about 1 to about 10% of porous silica microspheres having an average particle size between about 5 and about 20 microns. Claim 8 does not require the silica particles to be in the aqueous phase (component) and merely requires that the composition comprise an aqueous component, 1-10% silica particles, and at least 10% of a sunscreen. Singleton teaches a composition comprising (1) water as the aqueous component; (2) 0.1-15% homosalate (preferably 15%), 0.1-5% ethylhexyl salicylate (preferably 5%), 0.1-7.5% ethylhexylmethoxycinnamate (preferably 7.5%), 0.1-6% benzophenone-3 (preferably 6%), 0.1-3% avobenzene (preferably 2%), all of which are read on the sunscreen component and the water-insoluble organic ingredient; and (3) 0.1-20% silica (spheron L-500) (preferably 3.5%). Thus, applicant's arguments with regard to claim 8, rely on a certain feature that is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). However, assuming arguendo applicant amended the claims to recite an aqueous component containing the particles, for the reasons discussed above, the prior art would still meet this limitation.

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With regard to claims 13-22, the claims only recite "an aqueous component containing silica porous particles. As discussed above, the porous silica particles are neither soluble in the aqueous phase nor the oil phase. Thus, the particles disperse in both the oil phase and the aqueous phase (applicant's aqueous component) and the particles are present in both phases. The examiner points out that the instant claims only require that the silica particles are in the aqueous phase; however the claims do not exclude the silica particles from being present in the oil phase.

Therefore, the limitation that the silica particles are in present in the aqueous component is met by the prior art and Singleton is considered to anticipate the instant invention.

**Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Vatter et al (6,696,049).**

Vatter discloses a cosmetic compositions comprising: (i) from about 0.1% to about 15% of crosslinked organosiloxane elastomer having an average particle size less than 20 microns; (ii) from about 10 to about 80% of a solvent for the crosslinked siloxane elastomer; (iii) optionally, from 0 to about 50% of skin conditioning agent; and (iv) optionally, from above about 0 to about 95% of water. The cosmetic compositions preferably comprise water at from about 1% to about 95%, preferably from about 5% to about 90%, most preferably from about 10% to about 85%. See column 2, lines 5-30.

Vatter discloses the use of shine control agent to improve and/or regulate the condition of the shiny appearance of skin, which are typically porous in nature. Vatter discloses these agents, when applied to the skin provide a reservoir to absorb excess moisture into the pores, hence reducing the visible quantity of moisture on the skin. Vatter discloses it is preferable to combine the use of effective porous, absorbent materials with non-absorbing spherical materials (the



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organosiloxane). Vatter discloses silicas, particularly silica ellipsoids and silica microspheres in the amount from about 1% to about 40%; more preferably from about 1% to about 25%, and most preferably from about 2% to about 10%, by weight of the composition. Vatter discloses silica ellipsoids are available from DuPont as ZELEC Sil and Kobo as Silica Shells. Silica microspheres are available from Kobo as MSS-500, MSS500/3, MSS-500H, MSS500/3N, MSS-500N and MSS 500/3N; Presperse as Spheron L1500, Spheron P1500. Note these spheres have the instantly claimed particle size. See column 11, lines 4-54 and example V and IX-X.

Vatter also discloses the use of film forming agents to aid film substantivity and adhesion to the skin, which improve the long wear and non-transfer performance. Water-soluble, water insoluble, and water dispersible film forming agents are taught in the amount of about 0% to about 20%, more preferably, from about 0.1% to about 10%, and most preferably, from about 0.1% to about 5%. Organic silicone resins, polymer resins, polyurethane resins, and styrene-based materials are taught, all of which are water-insoluble organic materials. See column 12, line 25 to column 13, lines 5.

Vatter discloses the compositions preferably comprise an organic sunscreen, which have UVA absorbing properties, UVB absorbing properties, or a mixture thereof. The exact amount of the sunscreen active depends on the desired Sun Protection Factor, i. e., the "SPF" of the composition as well as the desired level of UVA protection. The compositions of the present invention preferably comprise an SPF of at least 10, preferably at least 15. UVA sunscreens are taught in the amount of 4-14% and a preferred UVA sunscreen is avobenzene. UVB sunscreens are taught in the amount of 0.1-16% and the preferred UVB sunscreen is octocrylene. See column 20, line 34 and line 66.

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Skin conditioning agents including emollients are selected from hydrocarbons, fatty acids, fatty alcohols and esters in the amount of 1-10% preferably.

Examples IX-X disclose a cream foundation for controlling shine comprising 5% silica (instant particles), 10% ethylene/acrylic acid copolymer microspheres (water-insoluble organic material), 31% cyclomethicone (oil component), 17.50% organopolysiloxane elastomer (water-insoluble silicone based organic polymer), 2% ally methacrylate copolymer (water insoluble organic component), and water, among other components. Note that the acrylate based spherical particles are disclosed in an amount of 8-30%. See column 12, lines 20-25.

### ***Response to Arguments***

Applicant argues that independent claim 1 has been amended to require the silica particles to be treated with an aqueous component/water or the silica particles are in the aqueous component. Applicant argues that claims 8-22 reflect the silica microspheres are part of the aqueous component, i.e. aqueous phase. Applicant argues that Vatter does not teach this and in example IX-X, Vatter disperses the silica particles in the emulsion after the emulsion is prepared.

Applicant's arguments filed 8/28/06 have been fully considered but they are not persuasive.

It is noted that the claim 1 has been amended to include (i) a product-by-process limitation: "wherein the porous silica microspheres are pretreated with water or the aqueous component prior to incorporation into the emulsion" or (ii) the structural limitation that the porous silica microspheres are contained in the aqueous component. Firstly, the examiner points out that porous silica particles are neither soluble in the aqueous phase nor the oil phase. Thus, the particles disperse in both the oil phase and the aqueous phase (applicant's aqueous

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component). Thus, the particles are present in both phases. The examiner points out that the instant claims and claim language does not exclude the silica particles from being present in the oil phase. Therefore, applicant's limitation (ii) is fulfilled and the claims only require (i) or (ii).

Although the claim 1 only requires (i) or (ii) and Vatter meets limitation (ii), the examiner will discuss limitation (i). The examiner points out that this limitation does not distinguish the instant claims from the prior art. Applicant argues that the pre-treatment with water prevents adsorption of the oil components. It is noted that pretreatment with water or an aqueous component allows the porous particle to adsorb the hydrophilic component. However, the pre-treatment of the porous particles with water does not preclude the particle from adsorbing oil as argued by applicant. The pre-treated porous particles are still capable of adsorbing the oil components, albeit a lesser amount of oil is adsorbed. The instant specification, page 4 is cited to substantiate the examiner's position:

All of the porous silica microspheres have the capability of absorbing large amounts of oils, which property could adversely affect their usefulness when the emulsion product contains organic ultraviolet-absorbing ingredients, since an unpredictable release from the microspheres of active ingredients after skin application of the product can prevent prolonged maintenance of sunscreens activity, particularly when the skin is in contact with water. Thus, it is preferable to either pre-treat the silica microspheres with water or an aqueous solution of product ingredients before the microspheres are incorporated into the emulsion product, or to include the silica microspheres in the aqueous component mixture during the formulation procedure. This will tend to fill the pores with aqueous material and prevent significant subsequent oil absorption.

From this disclosure it is clear that the pretreated particles will still have the ability to adsorb some oil. The complete prevention of adsorption oil as asserted by applicant is different from "prevent[ing] significant subsequent oil adsorption". The former means that the silica particles cannot adsorb any oil and the latter indicates that the particles can adsorb *some* oil, if not a lot. It is noted that the specification discloses the function of the silica particles in the composition is to adsorb oil to provide the dry feel. Applicant's arguments that the pretreatment

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of the silica particles prevents any adsorption of oil component is clearly opposite of what is disclosed in the specification. Thus, although the particles are pretreated with water causing the particles to adsorb water, the particles are still capable of adsorbing oil. Therefore, it is unclear what patentable distinguish the product-by-process limitation (i) provides since the particles still adsorb *both* oil and water and will disperse in both phases. It should be noted that that in a product-by-process limitation, applicant it is applicant's burden to demonstrate the patentable distinction the limitation provides. See MPEP 2113. It appears applicant's assertion is that the process of pretreatment imparts a structural limitation in that the pretreatment prevents adsorption of oil. However, as set forth above, the examiner does not agree with this assertion for the reasons stated above and moreover applicant's assertion is not supported by applicant's disclosure.

Lastly, it is pointed out that Vatter, as acknowledged by applicant, disperses the porous silica particles after the preparation of the emulsion. Thus, the porous particles that disperse in the oil phase will adsorb more oil than water since they are in the oil phase and the porous particles that disperse in the aqueous phase will adsorb more water than oil since they are in the aqueous phase; however clearly both phases will contain the particles since the particles are not soluble in either phase.

Therefore, the limitation that the silica particles are in present in the aqueous component is met by the prior art and Vatter is considered to anticipate the instant invention.

**New Rejection Necessitated by the IDS submitted 9/27/06**

**Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated EP 1036553 (IDS submission).**

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EP '553 discloses a solid water-in-oil emulsion cosmetic composition, which comprises hydrophobically treated powders, spherical silica, an oil, and water. See abstract. EP '553 discloses treating the silica particles are preferably porous and are treated with water or a hydrophilic component. see [0011-0013]. The silica particles have a diameter of 0.1-30 microns and preferably 1-10 microns and are utilized in the amount of 5-15%. See [0011]. Specifically example 4 teaches a composition comprising 5% liquid paraffin (water-insoluble organic ingredient), 5% glyceryl trioctanate (water-insoluble organic ingredient), 2% microcrystalline wax (water-insoluble organic ingredient), 2% carnauba wax (water-insoluble organic ingredient), 29% dimethylpolysiloxane (water-insoluble silicon based organic polymer-note this is considered a organic compound since the siloxane has organic moieties), 7% spherical silica, and water. Table 2 discloses a composition comprising 3% solid paraffin (water-insoluble organic ingredient), 1% carnauba wax (water-insoluble organic ingredient), 16% decamethylcyclopentasiloxane (water-insoluble silicon based organic polymer-note this is considered a organic compound since the siloxane has organic moieties), 5% dimethylpolysiloxane (water-insoluble silicon based organic polymer-note this is considered a organic compound since the siloxane has organic moieties), 1.5% 2-ethylhexyl p-methoxycinnamate (water-insoluble sunscreen), 7% spherical silica, and water.

Note with regard to limitation (i) and (ii), firstly it should be noted that porous silica particles are not soluble in either the oil phase or the aqueous phase and thus the particles will be dispersed in both phases. Thus, limitation (ii) is met. With regard to limitation, although this is considered a product-by-process limitation, EP '553 teaches this limitation.

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**The rejection of claims 1-5 under 35 U.S.C. 102(b) as being anticipated by EP 0679382 is withdrawn for the following reasons:**

The examiner notes that the claims require porous silica particles whereas the porous silica particles of EP are surface-coated with N-lauroyl-L-lysine, a hydrophobic coating. Thus, the particles are no longer porous as required by the claims. Further, the coating is hydrophobic and the particles will disperse in the oil phase. It should be noted that a coating on the surface of the particle is different and not equivalent to porous silica particles adsorbing of a component since in adsorption, the surface of the particle is not coated with a film. Hence the particles are still porous and capable of further adsorption.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**The rejection of claims 6-22 under 35 U.S.C. 103(a) as being unpatentable over Vatter et al (6,696,049) is maintained.**

Vatter discloses a cosmetic compositions comprising: (i) from about 0.1% to about 15% of crosslinked organosiloxane elastomer having an average particle size less than 20 microns; (ii) from about 10 to about 80% of a solvent for the crosslinked siloxane elastomer; (iii) optionally, from 0 to about 50% of skin conditioning agent; and (iv) optionally, from above about 0 to about 95% of water. The cosmetic compositions preferably comprise water at from about 1% to about

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95%, preferably from about 5% to about 90%, most preferably from about 10% to about 85%.

See column 2, lines 5-30.

Vatter discloses the use of shine control agent to improve and/or regulate the condition of the shiny appearance of skin, which are typically porous in nature. Vatter discloses these agents, when applied to the skin provide a reservoir to absorb excess moisture into the pores, hence reducing the visible quantity of moisture on the skin. Vatter discloses it is preferable to combine the use of effective porous, absorbent materials with non-absorbing spherical materials (the organosiloxane). Vatter discloses silicas, particularly silica ellipsoids and silica microspheres in the amount from about 1% to about 40%; more preferably from about 1% to about 25%, and most preferably from about 2% to about 10%, by weight of the composition. Vatter discloses silica ellipsoids are available from DuPont as ZELEC Sil and Kobo as Silica Shells. Silica microspheres are available from Kobo as MSS-500, MSS500/3, MSS-500H, MSS500/3N, MSS-500N and MSS 500/3N; Presperse as Spheron L1500, Spheron P1500. Note these spheres have the instantly claimed particle size. See column 11, lines 4-54 and example V and IX-X.

Vatter also discloses the use of film forming agents to aid film substantivity and adhesion to the skin, which improve the long wear and non-transfer performance. Water-soluble, water insoluble, and water dispersible film forming agents are taught in the amount of about 0% to about 20%, more preferably, from about 0.1% to about 10%, and most preferably, from about 0.1% to about 5%. Organic silicone resins, polymer resins, polyurethane resins, and styrene-based materials are taught, all of which are water-insoluble organic materials. See column 12, line 25 to column 13, lines 5.

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Vatter discloses the compositions preferably comprise an organic sunscreen, which have UVA absorbing properties, UVB absorbing properties, or a mixture thereof. The exact amount of the sunscreen active depends on the desired Sun Protection Factor, i. e., the "SPF" of the composition as well as the desired level of UVA protection. The compositions of the present invention preferably comprise an SPF of at least 10, preferably at least 15. UVA sunscreens are taught in the amount of 4-14% and a preferred UVA sunscreen is avobenzene. UVB sunscreens are taught in the amount of 0.1-16% and the preferred UVB sunscreen is octocrylene. See column 20, line 34 and line 66.

Skin conditioning agents including emollients are selected from hydrocarbons, fatty acids, fatty alcohols and esters in the amount of 1-10% preferably.

Vatter does not specifically teach a combination of the instant sunscreens and instant porous silica particles.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to look to the guidance provided by Vatter et al and utilize the instant combination of silica particles and organic sunscreens, particularly the instant sunscreens. For instance, Vatter teaches a cream for oil control comprising the instant silica particles and thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to further add organic sunscreens to this composition if one desired to render a shine control cream foundation that provides UV protection. Furthermore, one would have been motivated to add the desired concentration of the sunscreen to provide the desired SPF as taught by Vatter on column 19, lines 42-60. Thus, a skilled artisan would have been motivated to manipulate the concentration of



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the sunscreen to provide the desired SPF wherein an increased concentration of the UVA and UVB sunscreen would provide a higher SPF, which is known in the art.

***Response to Arguments***

Applicant argues that the claims require the porous silica particles to be present in the aqueous phase. Applicant argues that Vatter does not teach this. Applicant argues that Vatter either teaches combining the silica particles with the oil components prior to emulsion preparation or as seen in example IX-X, Vatter disperses the silica particles in the emulsion after the emulsion is prepared.

Applicant's arguments filed 8/28/06 have been fully considered but they are not persuasive.

It is noted that the claim 1 has been amended to include (i) a product-by-process limitation: "wherein the porous silica microspheres are pretreated with water or the aqueous component prior to incorporation into the emulsion" or (ii) the structural limitation that the porous silica microspheres are contained in the aqueous component. As discussed above under the anticipation rejection, the examiner points out that porous silica particles are neither soluble in the aqueous phase nor the oil phase. Thus, the particles disperse in both the oil phase and the aqueous phase (applicant's aqueous component). Thus, the particles are present in both phases. The examiner points out that the instant claims and claim language does not exclude the silica particles from being present in the oil phase. Therefore, applicant's limitation (ii) is fulfilled and the claims only require (i) or (ii). Thus, the rejection of dependent claims 6-7 is proper since limitation (ii) is met in independent claim 1.

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With regard to claims 13-22, the claims only recite “an aqueous component containing silica porous particles. As discussed above, the porous silica particles are neither soluble in the aqueous phase nor the oil phase. Thus, the particles disperse in both the oil phase and the aqueous phase (applicant’s aqueous component). Thus, the particles are present in both phases. The examiner points out that the instant claims only require that the silica particles are in the aqueous phase; however the claims do not exclude the silica particles from being present in the oil phase.

The examiner points out that claim 8 is directed to an emulsion composition for skin application comprising an aqueous component, a sunscreen component totaling at least about 10%, and about 1 to about 10% of porous silica microspheres having an average particle size between about 5 and about 20 microns. Claim 8 does not require the silica particles to be in the aqueous phase (component) and merely requires that the composition comprise an aqueous component, 1-10% silica particles, and at least 10% of a sunscreen. Vatter teaches a composition comprising (1) water as the aqueous component; (2) at least 10% of a water insoluble organic sunscreen (UVA sunscreens are taught in the amount of 4-14%) and UVB sunscreens are taught in the amount of 0.1-16%); and about 2-10% of porous silica particles. Thus, applicant’s arguments with regard to claim 8, rely on a certain feature that is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). However, assuming arguendo applicant amended the claims to recite an aqueous component containing..., for the reasons discussed above, the prior art would still meet this limitation.

*New Rejection Necessitated by the IDS submitted 9/27/06*

**Claims 7-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1036553 (IDS submission) in view of Vatter et al (6,696,049).**

EP '553 teaches a solid water-in-oil emulsion cosmetic composition, which comprises hydrophobically treated powders, spherical silica, an oil, and water. See abstract. The cosmetic composition may be in the form of lipsticks, foundations, eyeshadows, etc. see [0026]. EP '553 discloses treated the silica particles are preferably porous and are treated with water or a hydrophilic component. see [0011-0013]. The silica particles have a diameter of 0.1-30 microns and preferably 1-10 microns and are utilized in the amount of 5-15%. See [0011]. Specifically example 4 teaches a composition comprising 5% liquid paraffin (water-insoluble organic ingredient), 5% glyceryl trioctanate (water-insoluble organic ingredient), 2% microcrystalline wax (water-insoluble organic ingredient), 2% carnauba wax (water-insoluble organic ingredient), 29% dimethylpolysiloxane (water-insoluble silicon based organic polymer), 7% spherical silica, and water. Table 2 discloses a composition comprising 3% solid paraffin (water-insoluble organic ingredient), 1% carnauba wax (water-insoluble organic ingredient), 5% dimethylpolysiloxane (water-insoluble silicon based organic polymer), 1.5% 2-ethylhexyl p-methoxycinnamate, 7% spherical silica, and water. As seen in Table 2, a organic sunscreen 2-ethylhexyl p-methoxycinnamate is taught.

Although EP '553 teaches the incorporation of water-insoluble organic sunscreen (2-ethylhexyl p-methoxycinnamate), EP does not teach sunscreens in general or organic sunscreens, in the instant amount.

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Vatter teaches a cosmetic compositions such as lipsticks and foundations comprising: (i) from about 0.1% to about 15% of crosslinked organosiloxane elastomer having an average particle size less than 20 microns; (ii) from about 10 to about 80% of a solvent for the crosslinked siloxane elastomer; (iii) optionally, from 0 to about 50% of skin conditioning agent; and (iv) optionally, from above about 0 to about 95% of water. Further, Vatter teaches the use of shine control agent to improve and/or regulate the condition of the shiny appearance of skin, which are typically porous in nature. These oil control agents include porous silica spheres. Vatter teaches the compositions preferably comprise an organic sunscreen, which have UVA absorbing properties, UVB absorbing properties, or a mixture thereof. The exact amount of the sunscreen active depends on the desired Sun Protection Factor, i. e., the "SPF" of the composition as well as the desired level of UVA protection. The compositions of the present invention preferably comprise an SPF of at least 10, preferably at least 15. UVA sunscreens are taught in the amount of 4-14% and a preferred UVA sunscreen is avobenzone. UVB sunscreens are taught in the amount of 0.1-16% and include 2-ethylhexyl p-methoxycinnamate wherein the preferred UVB sunscreen is octocrylene. See column 20, line 34 and line 66.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of EP '553 and Vatter et al and utilize the sunscreen agent in the instant amount. One would have been motivate to do so since EP '553 teaches the suitability of an organic sunscreen and Vatter teaches the amount of UVA and UVB sunscreens utilized on the desired level of "SPF" wherein the UVA sunscreens are taught in an amount of 4-14% and UVB sunscreens are taught in an 0.1-16%. Thus, it would have been prima facie obvious for a skilled artisan to increase the amount of 2-ethylhexyl p-methoxycinnamate, if one desired to

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formulate a composition with a high SPF. With regard to the claims directed to specific SPF values, the concentration of the sunscreens utilized determines the SPF as taught by Vatter and thus to render a sunscreen with an SPF of 45, for instance, it would have been obvious to utilize the maximum concentration as taught by Vatter and as known in the art.

With regard to claim 14, it would have been obvious for a skilled artisan in view of Vatter's teachings to formulate EP's composition with two organic sunscreens. Vatter teaches the use of a UVA sunscreen to absorb UVA rays and UVB sunscreens to absorb UVB rays and mixtures thereof. Therefore a skilled artisan would have been motivated to utilize both to formulate a composition that provided protection against both UVA and UVB rays.

With regard to independent claims 17, 19, and 21, EP '553 teaches 2-ethylhexyl p-methoxycinnamate but does not teach the use of the instant organic sunscreen (octocrylene, homosalate, avobenzone). However, it would have been obvious to a skilled artisan to substitute the prior art's 2-ethylhexyl p-methoxycinnamate with the instant octocrylene. One would have been motivated to do so since Vatter teaches that 2-ethylhexyl p-methoxycinnamate and octocrylene are both UVB absorbing sunscreen. Thus a skilled artisan would have expected similar results in substituting 2-ethylhexyl p-methoxycinnamate with the instant octocrylene since the art establishes they are functional equivalents. With regard to the combination of the organic sunscreens as claimed in 17, 19, and 21, it would have been obvious for a skilled artisan in view of Vatter's teachings to formulate EP's composition with two organic sunscreens. Vatter teaches the use of a UVA sunscreen to absorb UVA rays and UVB sunscreens to absorb UVB rays and mixtures thereof. Therefore a skilled artisan would have been motivated to utilize both to formulate a composition that provided protection against both UVA and UVB rays.

*Conclusion*

All the claims rejected at this time.

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 9/27/06 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

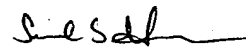
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharmila S. Gollamudi whose telephone number is 571-272-0614. The examiner can normally be reached on M-F (8:00-5:30), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sharmila S. Gollamudi  
Examiner  
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